

## Information for File #MVP-2014-02569-SEW

**Applicant:** Minnesota Department of Transportation, Metro District, c/o Mr. Hailu Shekur

**Corps Contact:** Sarah Wingert, 180 Fifth Street East, Suite 700, St. Paul, MN 55101, [Sarah.E.Wingert@usace.army.mil](mailto:Sarah.E.Wingert@usace.army.mil), (651) 290-5358

**Primary County:** Hennepin

**Location:** Section 3, Township 117N., Range 22W.; Sections 3, 10, 15, 22, 27, and 34, Township 118N., Range 22W.; and Sections 27 and 34, Township 118N., Range 22W.

**Information Complete On:** December 9, 2014

**Posting Expires On:** December 22, 2014

### Authorization Type:

This application is being reviewed in accordance with the practices for documenting Corps jurisdiction under Sections 9 & 10 of the Rivers and Harbor Act of 1899 and Section 404 of the Clean Water Act identified in Regulatory Guidance Letter 07-01. We have made a preliminary determination that the aquatic resources that would be impacted by the proposed project are regulated by the Corps of Engineers under Section 404 of the Clean Water Act. Our jurisdictional review and final jurisdictional determination could result in modifications to the scope of the project's regulated waterbody/wetland impacts and compensatory mitigation requirements identified above.

### PROJECT INVOLVES:

- 1) *Linear Project:* The project would occur on approximately 8.5 miles of Interstate 494 (I-494), between the Fish Lake Interchange, which is the interchange between I-494 and I-94/I-694 in Maple Grove, and I-394 in Plymouth/Minnetonka.
- 2) *A Listed State-Impaired Water:* None of the streams that cross the project corridor are listed as state-impaired waters, though two of the streams that cross the corridor are impaired downstream of the project, including Bass Creek and Bassett Creek. Bass Creek is impaired for aquatic life by chloride, and Bassett Creek is impaired for aquatic life and aquatic recreation by chloride and for fishes bioassessments, and impaired for aquatic recreation by fecal coliform.
- 3) *FEMA 100-Year Floodplain:* The project corridor crosses the 100-year floodplain for Plymouth Creek, located north of the I-494 intersection with TH 55. The culvert that passes Plymouth Creek under I-494 would be left in place, and would not be altered by this project. No additional fill would be placed in the Plymouth Creek floodplain because the new traffic lanes would be constructed on existing fill.

**PROJECT DESCRIPTION AND PURPOSE:** The Minnesota Department of Transportation proposes to make improvements to approximately 8.5 miles of I-494 located between the I-394

interchange and the I-94 interchange (known as the “Fish Lake Interchange”) for maintenance and mobility improvement purposes. The pavement on this segment is approximately 20 years old and is deteriorating. This corridor also experiences directional congestion issues during the morning and afternoon peak traffic hours, particularly for southbound traffic in the mornings and northbound traffic in the evenings. The existing roadway is a principal arterial freeway, and consists of three travel lanes in both directions between the I-394 and Trunk Highway (TH) 55 (approximately 2.75 miles), two travel lanes in both directions between TH 55 and East Fish Lake Road (approximately 5 miles), and three travel lanes in both directions between East Fish Lake Road and the Fish Lake Interchange (approximately 0.75 mile).

The proposed project would add a general purpose travel lane to both the I-494 northbound and southbound corridors between TH 55 and East Fish Lake Road. The new lanes would be constructed on the inside shoulders (median), and a median barrier would be installed between the northbound and southbound corridors. Also, an approximately 0.4-mile northbound I-494 auxiliary lane would be constructed along the outer shoulder of the I-494 lanes between the entrance ramp from westbound I-394 to the exit ramp at Carlson Parkway, and an approximately 0.4-mile northbound I-494 auxiliary lane would be constructed along the outer shoulder of the lanes between the County State Aid Highway (CSAH) 6 entrance and TH 55 exit ramps. No lanes would be added to the segment between the Carlson Parkway and CSAH 6 ramps. Finally, an auxiliary lane would be constructed on the outer shoulder of I-494 southbound between the Fish Lake Interchange and CSAH 10 exit ramp (approx. 0.9 mile), for a total of four traffic lanes on this segment.

The project would include unbounded concrete overlay on I-494 in two locations: between I-394 and north of Carlson Parkway, and between TH 55 and the Fish Lake Interchange. Concrete pavement repair would occur between north of Carlson Parkway through the TH 55 interchange and on the CSAH 6 interchange. Ramp reconstruction would occur at the Carlson Parkway, TH 55, CSAH 10, and CSAH 9 interchanges. Six I-494 bridges would be replaced with wider structures to accommodate the new general purpose lanes, including the northbound and southbound bridges over Schmidt Lake Road, the CP Railway, and County Road (CR) 47. These new bridges would also be raised to account for the height added by the unbounded concrete overlay. Repair work would occur on eight I-494 bridges, including the bridges over East Fish Lake Road, Cheshire Lake, Carlson Parkway, TH 55, CSAH 9, and CSAH 10, and the two bridges at the Fish Lake Interchange. The project also includes the installation of noise barriers at seven locations, and modifications to stormwater ponds and filtration basins at six locations along the I-494 corridor.

**NAME, AREA AND TYPES OF WATERS (INCLUDING WETLANDS) SUBJECT TO LOSS:** As proposed, the project would result in approximately 1.64 acres of permanent wetland impacts, 0.18 acre of temporary wetland impacts, and 0.13 acre of permanent stream impacts. Approximately 1.44 acres of the permanent wetland impacts would occur to roadside ditches with wetlands in the bottom. One stream, Bass Creek, would be impacted by the replacement of an 84-inch diameter reinforced concrete pipe (RCP) culvert with a new 84-inch diameter RCP located north of the CP Railway bridges. The proposed impacts are listed by wetland basin (including wetland types) and stream ID on the attached tables labeled “2014-02569-SEW, Tables 1-4 of 4”, and are shown on the attached figures labeled “2014-02569-SEW, Figures 2-15 of 15”.

**COMPENSATORY MITIGATION:** The applicant proposes to compensate for the unavoidable adverse wetland impacts that would result in loss of wetland function by debiting a total of 1.84 deep marsh wetland credits from a Corps-approved bank in Hennepin County (Bank Account S2166-1101, Minnetrista Bank). The applicant proposes to mitigate impacts to wetlands located outside roadside ditches at a 2:1 ratio, and to mitigate impacts to ditches with wetlands in the bottom at a 1:1 ratio.

**DRAWINGS:** See attached figures labeled “2014-02569-SEW, Tables 1-4 of 4 and Figures 1-15 of 15”.

**2014-02569-SEW, Table 1 of 4: Proposed Aquatic Resource Impacts (from permit application)**

<b>Aquatic Resource ID</b> (as noted on overhead view)	<b>Aquatic Resource Type</b> (wetland, lake, tributary etc.)	<b>Type of Impact</b> (fill, excavate, drain, or remove vegetation)	<b>Duration of Impact</b> Permanent (P) or Temporary (T) <sup>1</sup>	<b>Size of Impact</b> <sup>2</sup>	<b>Overall Size of Aquatic Resource</b> <sup>3</sup>	<b>Existing Plant Community Type(s)</b> in Impact Area <sup>4</sup>	<b>County, Major Watershed #, and Bank Service Area #</b> of Impact Area <sup>5</sup>
<b>Temporary Wetland Impacts (Restoration Only – No Permanent Wetland Mitigation)</b>							
Wetland Ditch 3	Ditch Wetland	Fill, excavation and vegetation removal	T <180	158 sq. ft.	0.41 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland N-22	Wetland	Fill, excavation and vegetation removal	T <180	0.03 ac.	2.62 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland Ditch 10	Ditch Wetland	Fill, excavation and vegetation removal	T <180	0.02 ac.	0.18 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland Ditch 26 *Figure 7	Ditch Wetland	Fill, excavation and vegetation removal	T <180	89 sq. ft.	0.04 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland Ditch 15	Ditch Wetland	Fill, excavation and vegetation removal	T <180	310 sq. ft.	0.09 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland N-26	Wetland	Fill, excavation, and vegetation removal	T <180	214 sq. ft.	2.11 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland Ditch 16	Ditch Wetland	Fill, excavation, and vegetation removal	T <180	163 sq. ft.	0.13 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland N-27 (DNR 593W)	Wetland	Fill, excavation and vegetation removal	T <180	0.03 ac.	38.67 ac	Type 4 PEMF	Hennepin, 20, BSA 7
Wetland Ditch 17	Wetland	Fill, excavation and vegetation removal	T <180	165 Sq. Ft.	0.04 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland N-29D	Wetland	Fill, excavation and vegetation removal	T <180	0.03 ac.	0.49 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland Ditch 19	Wetland	Fill, excavation and vegetation removal	T <180	222 Sq. Ft.	0.06 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland N-30	Wetland	Fill, excavation and vegetation removal	T <180	0.02 ac.	0.84 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland S-3A	Wetland	Fill, excavation and vegetation removal	T <180	0.01 ac.	1.88 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland Ditch 25	Wetland	Fill, excavation and vegetation removal	T <180	0.01 ac.	0.33 ac	Type 3 PEMC	Hennepin, 20, BSA 7
<b>Total Temporary Impacts = 0.18 acres Wetland Mitigation Required = 0.0 acres</b>							

2014-02569-SEW, Table 2 of 4: Proposed Aquatic Resource Impacts (from permit application)

Aquatic Resource ID (as noted on overhead view)	Aquatic Resource Type (wetland, lake, tributary etc.)	Type of Impact (fill, excavate, drain, or remove vegetation)	Duration of Impact Permanent (P) or Temporary (T) <sup>1</sup>	Size of Impact <sup>2</sup>	Overall Size of Aquatic Resource <sup>3</sup>	Existing Plant Community Type(s) in Impact Area <sup>4</sup>	County, Major Watershed #, and Bank Service Area # of Impact Area <sup>5</sup>
<b>WCA/USACE Wetland Impacts (2:1 Wetland Mitigation Ratio)</b>							
Wetland N-21A	Wetland	Fill	P	0.01 ac.	2.95 ac	Type 4 PEMF	Hennepin, 20, BSA 7
Wetland S-10	Wetland	Fill	P	132 Sq. Ft.	13.62 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland S-9	Wetland	Fill	P	73 Sq. Ft.	1.22 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland S-7C	Wetland	Fill	P	212 Sq. Ft.	0.1 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland S-7B	Wetland	Fill	P	331 Sq. Ft.	0.28 ac	Type 1 PEMA	Hennepin, 20, BSA 7
Wetland N-25	Wetland	Fill	P	0.03 ac.	0.55 ac	Type 2 PEMB	Hennepin, 20, BSA 7
Wetland S-6 (DNR 694W)	Wetland	Fill	P	295 sq. ft.	26.96 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland N-27 (DNR 593W)	Wetland	Fill	P	0.02 ac.	38.67 ac	Type 4 PEMF	Hennepin, 20, BSA 7
Wetland S-4	Wetland	Fill	P	278 sq. ft.	4.36 ac.	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland N-28	Wetland	Fill	P	60 sq. ft.	0.56 ac	Type 4 PEMF	Hennepin, 20, BSA 7
Wetland N-29D	Wetland	Fill	P	265 sq. ft.	0.49 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland N-29C	Wetland	Fill	P	0.04 ac.	0.48 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland N-30	Wetland	Fill	P	76 sq. ft.	0.84 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland N-32 (DNR 541W)	Wetland	Fill	P	0.02 ac.	12.02 ac	Type 4 PEMF	Hennepin, 20, BSA 7
Wetland S-3A (DNR 541W)	Wetland	Fill	P	0.04 ac.	1.88 ac	Type 3 PEMC	Hennepin, 20, BSA 7
<b>Total WCA/USACE Impacts = 0.20 acres</b> <b>Wetland Mitigation Required at a 2:1 ratio = 0.40 acres</b>							

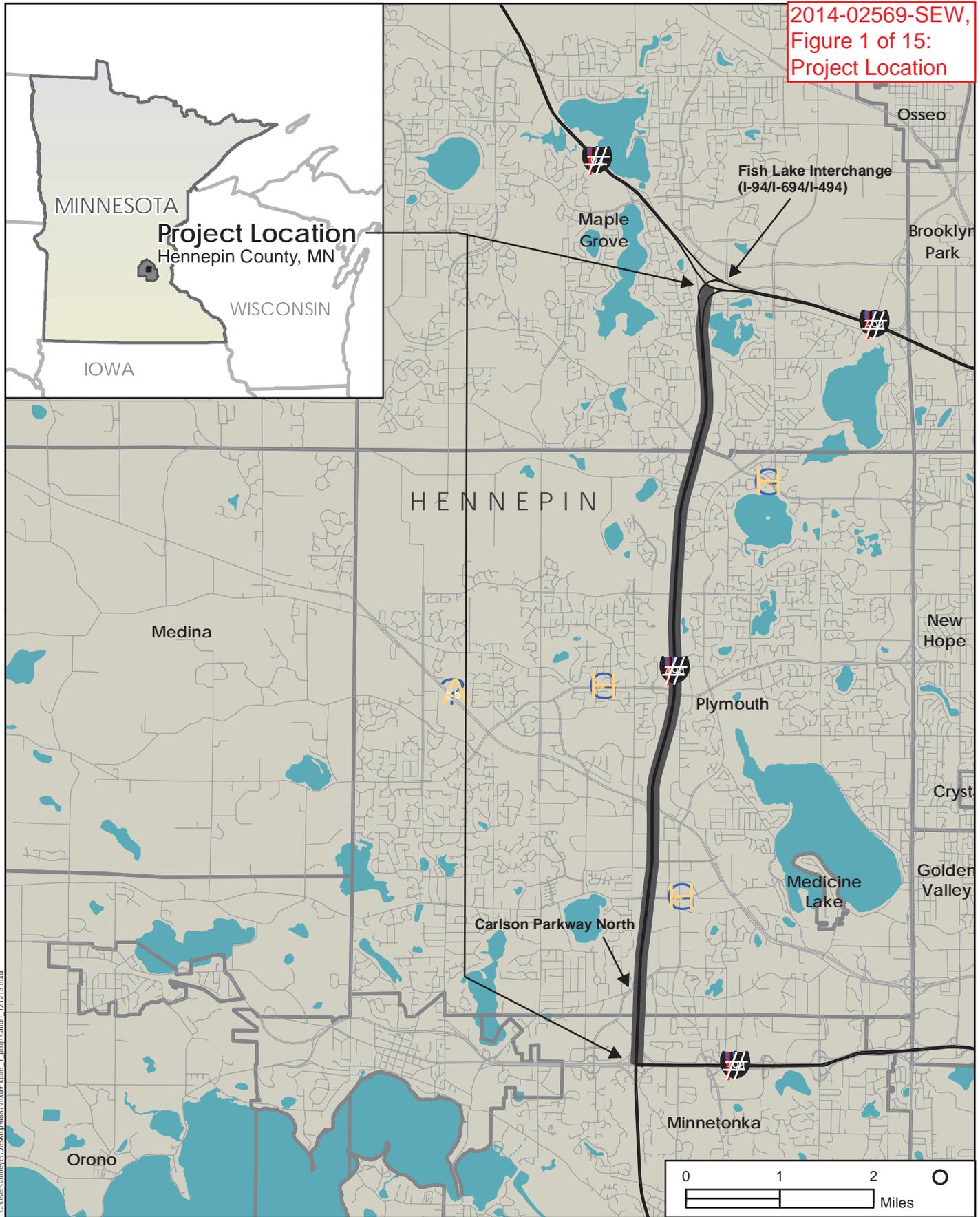
2014-02569-SEW, Table 3 of 4: Proposed Aquatic Resource Impacts (from permit application)

Aquatic Resource ID (as noted on overhead view)	Aquatic Resource Type (wetland, lake, tributary etc.)	Type of Impact (fill, excavate, drain, or remove vegetation)	Duration of Impact Permanent (P) or Temporary (T) <sup>1</sup>	Size of Impact <sup>2</sup>	Overall Size of Aquatic Resource <sup>3</sup>	Existing Plant Community Type(s) in Impact Area <sup>4</sup>	County, Major Watershed #, and Bank Service Area # of Impact Area <sup>5</sup>
<b>USACE ONLY Wetland Impacts (Assumed Mitigation Ratio 1:1 per USACE Correspondence)</b>							
Wetland Ditch 1	Ditch Wetland	Fill	P	125 Sq. Ft.	0.31 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland Ditch 3	Ditch Wetland	Fill	P	0.23 ac.	0.41 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland Ditch 4	Wetland Ditch	Fill	P	283 Sq. Ft.	0.23 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland Ditch 5	Ditch Wetland	Fill	P	51 Sq. Ft.	0.03 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland Ditch 7	Ditch Wetland	Fill	P	160 Sq. Ft.	0.1 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland Ditch 8	Ditch Wetland	Fill	P	0.03 ac.	0.19 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland Ditch 9	Ditch Wetland	Fill	P	216 Sq. Ft.	0.08 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland Ditch 10	Ditch Wetland	Fill	P	127 Sq. Ft.	0.18 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland Ditch 11	Ditch Wetland	Fill	P	0.07 ac.	0.06 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland Ditch 12	Ditch Wetland	Fill	P	0.09 ac.	0.09 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland Ditch 13	Ditch Wetland	Fill	P	0.08 ac.	0.08 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland Ditch 14	Ditch Wetland	Fill	P	0.09 ac.	0.09 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland Ditch 26 *Figure 7	Ditch Wetland	Fill	P	20 sq. ft.	0.04 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland Ditch 15	Ditch Wetland	Fill	P	0.03 ac.	0.09 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland Ditch 16	Ditch Wetland	Fill	P	0.11 ac.	0.13 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland Ditch 17	Ditch Wetland	Fill	P	156 Sq. Ft.	0.04 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland Ditch 18	Ditch Wetland	Fill	P	0.07 ac.	0.18 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland Ditch 19	Ditch Wetland	Fill	P	49 Sq. Ft.	0.06 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland Ditch 20	Ditch Wetland	Fill	P	0.02 ac.	0.09 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland Ditch 21	Ditch Wetland	Fill	P	0.09 ac.	0.08 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland Ditch 22	Ditch Wetland	Fill	P	0.10 ac.	0.09 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland Ditch 23	Ditch Wetland	Fill	P	386 Sq. Ft.	0.13 ac	Type 3 PEMC	Hennepin, 20, BSA 7
Wetland Ditch 24	Ditch Wetland	Fill	P	0.29 ac.	0.29 ac	Type 3	Hennepin, 20,

2014-02569-SEW, Table 4 of 4: Proposed Aquatic Resource Impacts (from permit application)

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						PEMC	BSA 7
Wetland Ditch 25	Ditch Wetland	Fill	P	0.11 ac.	0.33 ac	Type 3 PEMC	Hennepin, 20, BSA 7
<b>Total USACE Wetland Impacts = 1.44 acres</b> <b>Wetland Mitigation Required at a 1:1 ratio = 1.44 acres</b>							
<b>Permanent Stream Impacts</b>							
Bass Creek	Stream	Fill	P	0.06 ac	N/A	N/A	Hennepin, 20, BSA 7
Bass Creek	Stream	Cut	P	0.07 ac	N/A	N/A	Hennepin, 20, BSA 7
<b>Total Stream Impacts = 0.13 acre</b> <b>Wetland Mitigation Required = 0.0 acres</b>							

**Total Compensatory Mitigation for Project = 1.84 acres**

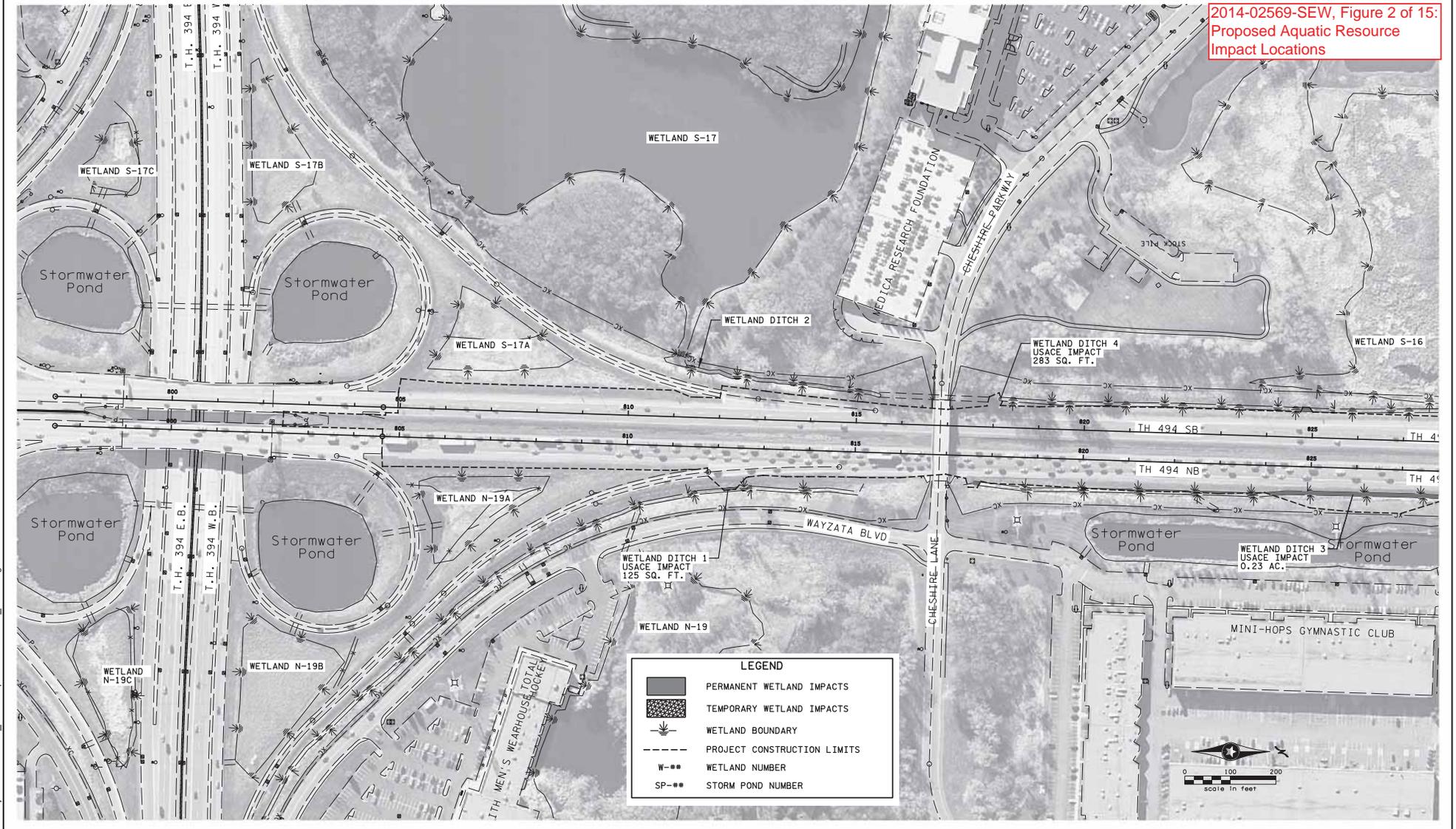


### Area Location

I-494 Rehabilitation Project  
SP 2785-330  
Mn/DOT

Figure 1

2014-02569-SEW, Figure 2 of 15:  
Proposed Aquatic Resource  
Impact Locations



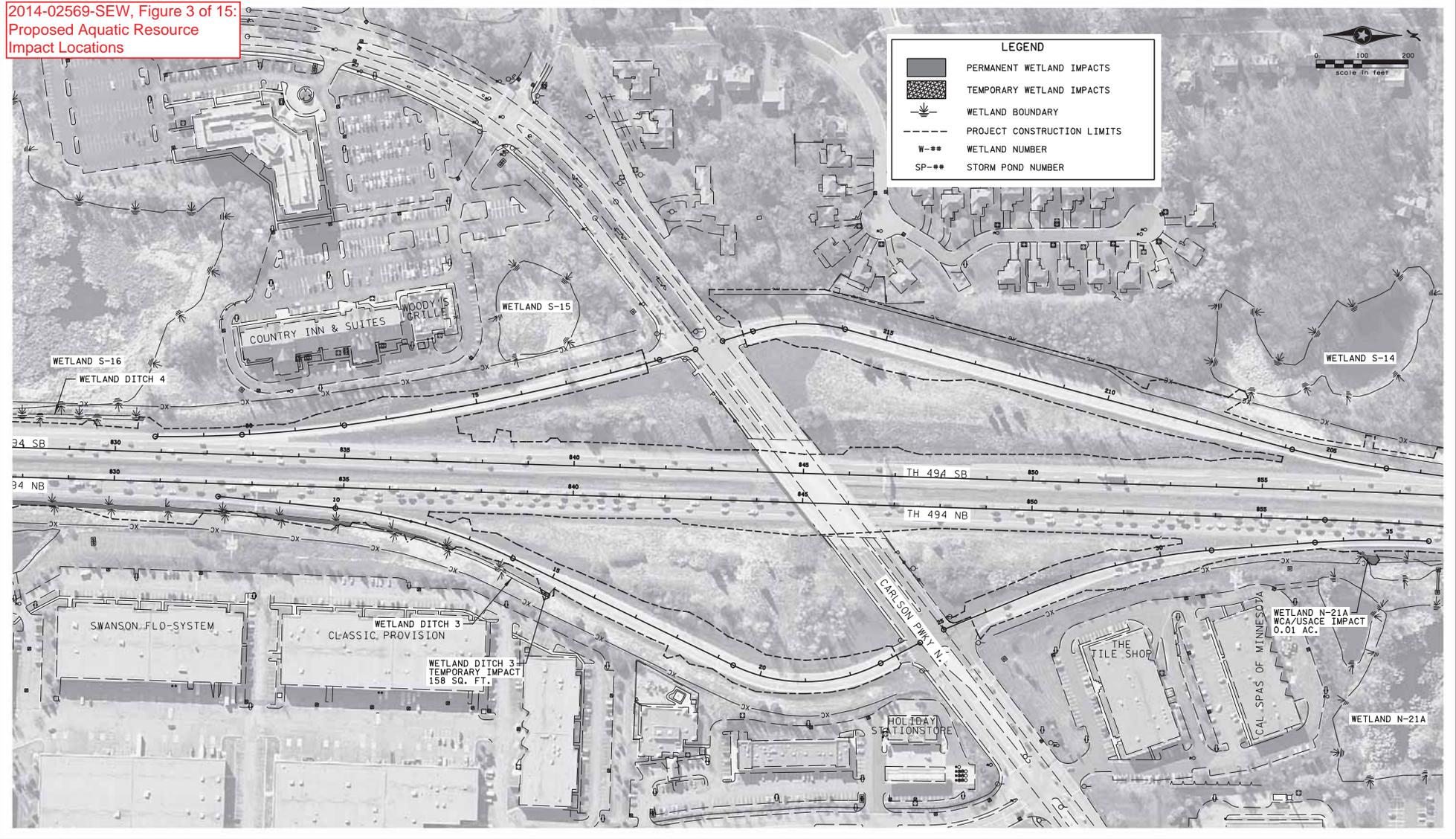
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**SRE** WETLAND IMPACTS

Consulting Group, Inc.  
T.H. 494 GENERAL PURPOSE LANES (OAKLAND AVE TO FISH LAKE INTERCHANGE)  
Job # S.P. 2785-330  
10/15/2014 MnDOT

Figure 2

2014-02569-SEW, Figure 3 of 15:  
Proposed Aquatic Resource  
Impact Locations



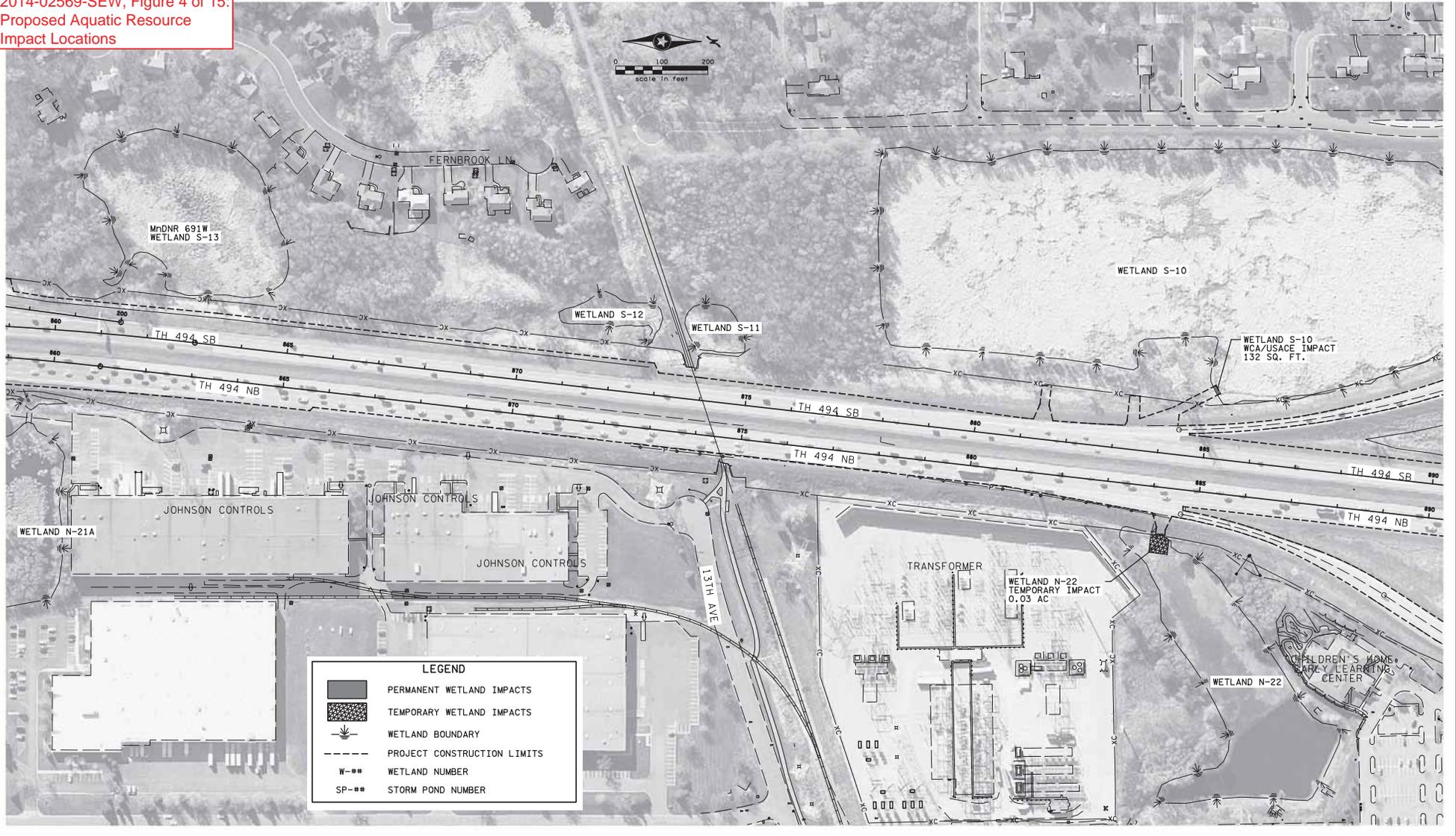
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**SRE** WETLAND IMPACTS

Consulting Group, Inc.  
T.H. 494 GENERAL PURPOSE LANES (OAKLAND AVE TO FISH LAKE INTERCHANGE)  
S.P. 2785-330  
MnDOT

Figure 3

2014-02569-SEW, Figure 4 of 15:  
Proposed Aquatic Resource  
Impact Locations



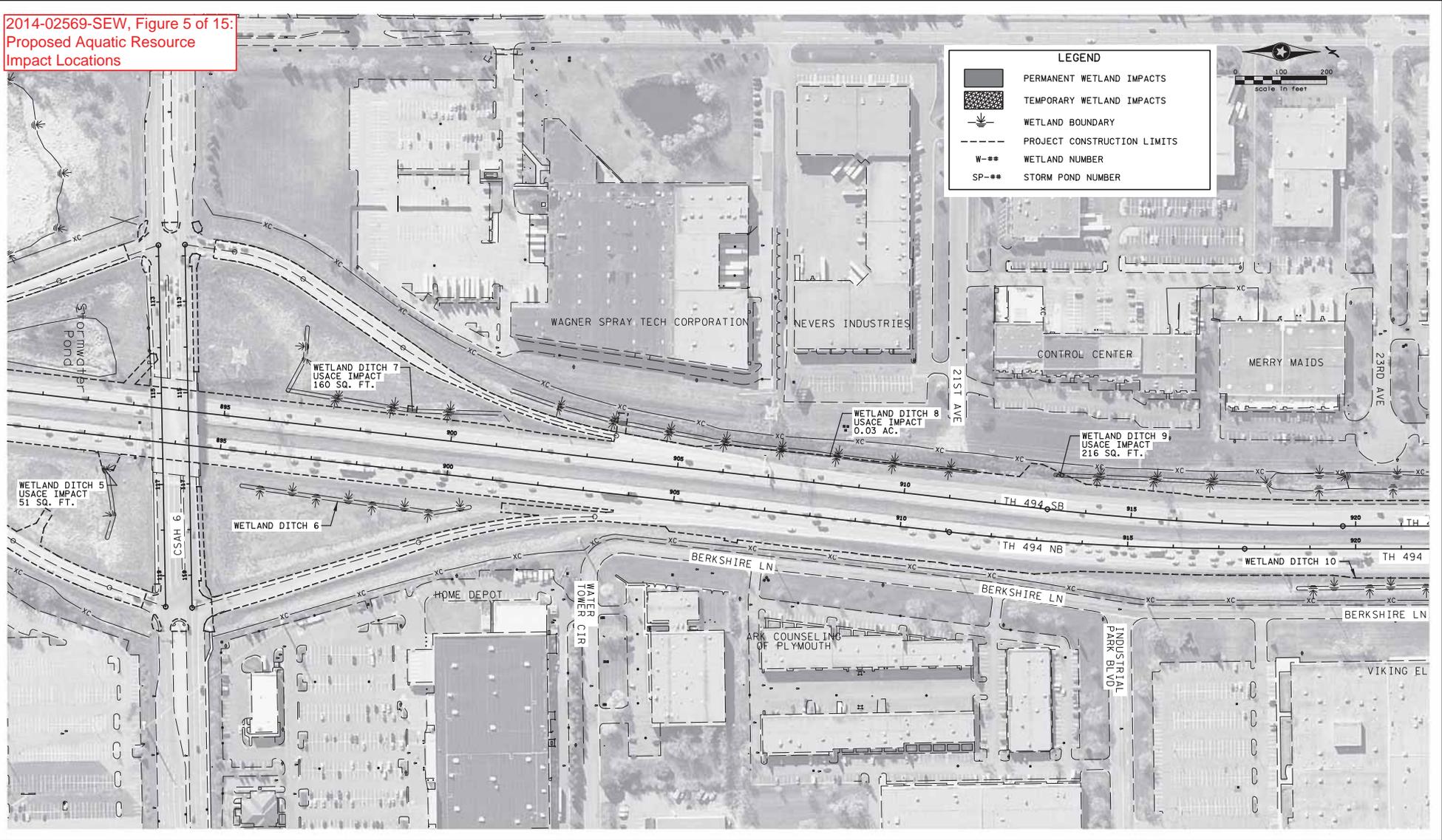
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**SRE** WETLAND IMPACTS

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Figure 4

2014-02569-SEW, Figure 5 of 15:  
Proposed Aquatic Resource  
Impact Locations



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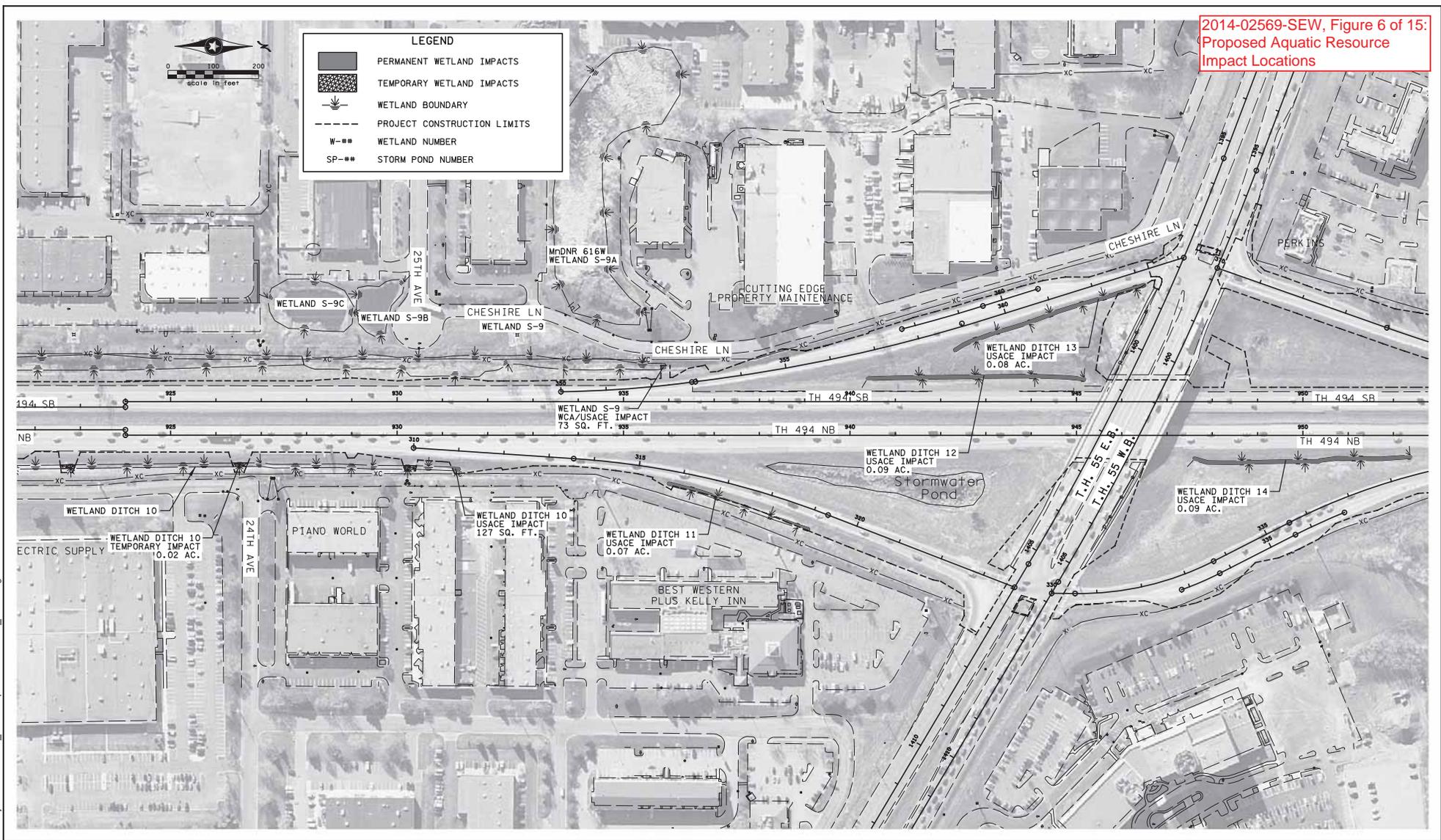
**WETLAND IMPACTS**

T.H. 494 GENERAL PURPOSE LANES (OAKLAND AVE TO FISH LAKE INTERCHANGE)  
S.P. 2785-330  
MnDOT

Job #  
10/15/2014

Figure 5

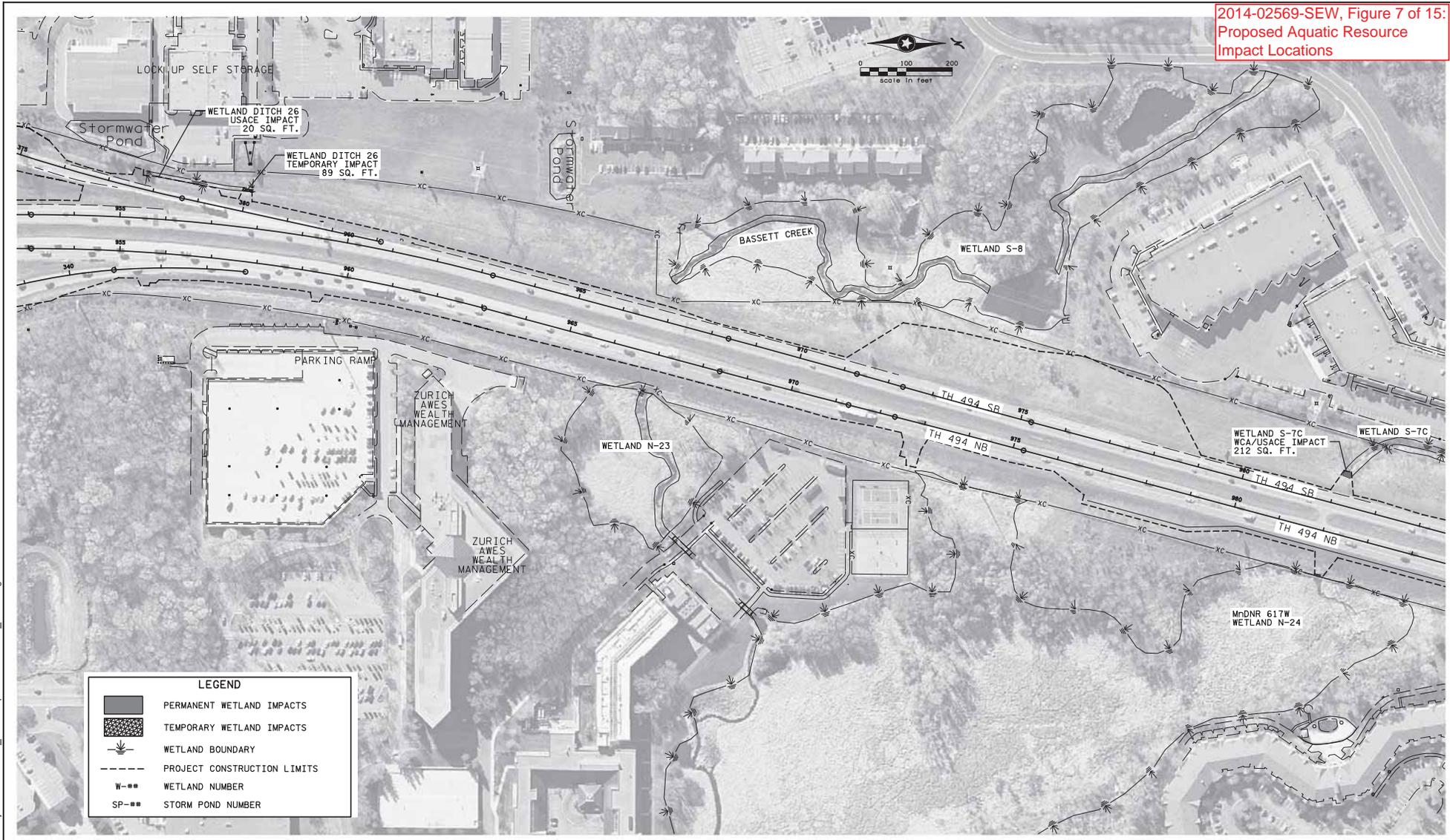
2014-02569-SEW, Figure 6 of 15:  
Proposed Aquatic Resource  
Impact Locations



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Figure 6

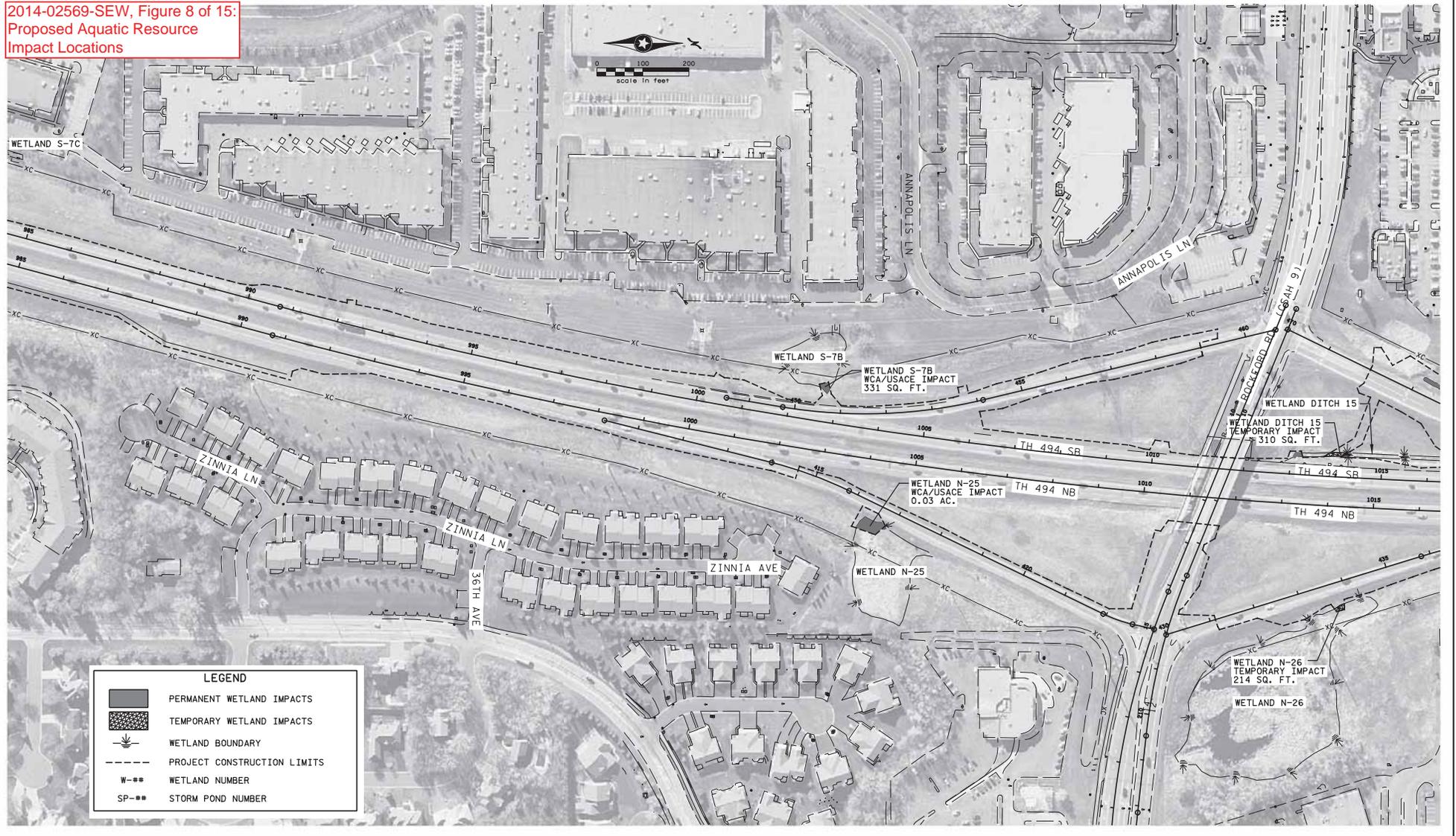
2014-02569-SEW, Figure 7 of 15:  
Proposed Aquatic Resource  
Impact Locations



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Figure 7

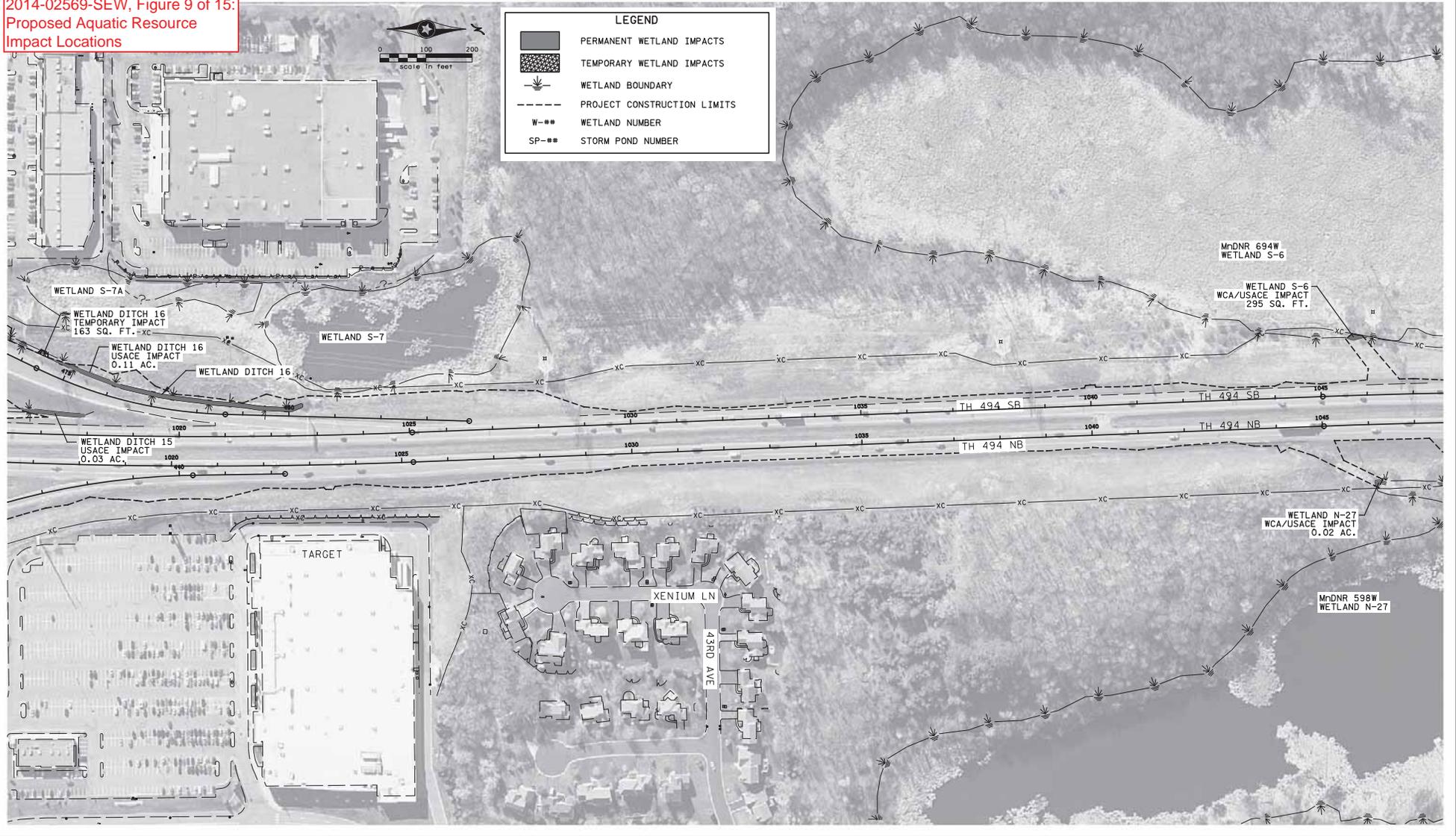
2014-02569-SEW, Figure 8 of 15:  
Proposed Aquatic Resource  
Impact Locations



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Figure 8

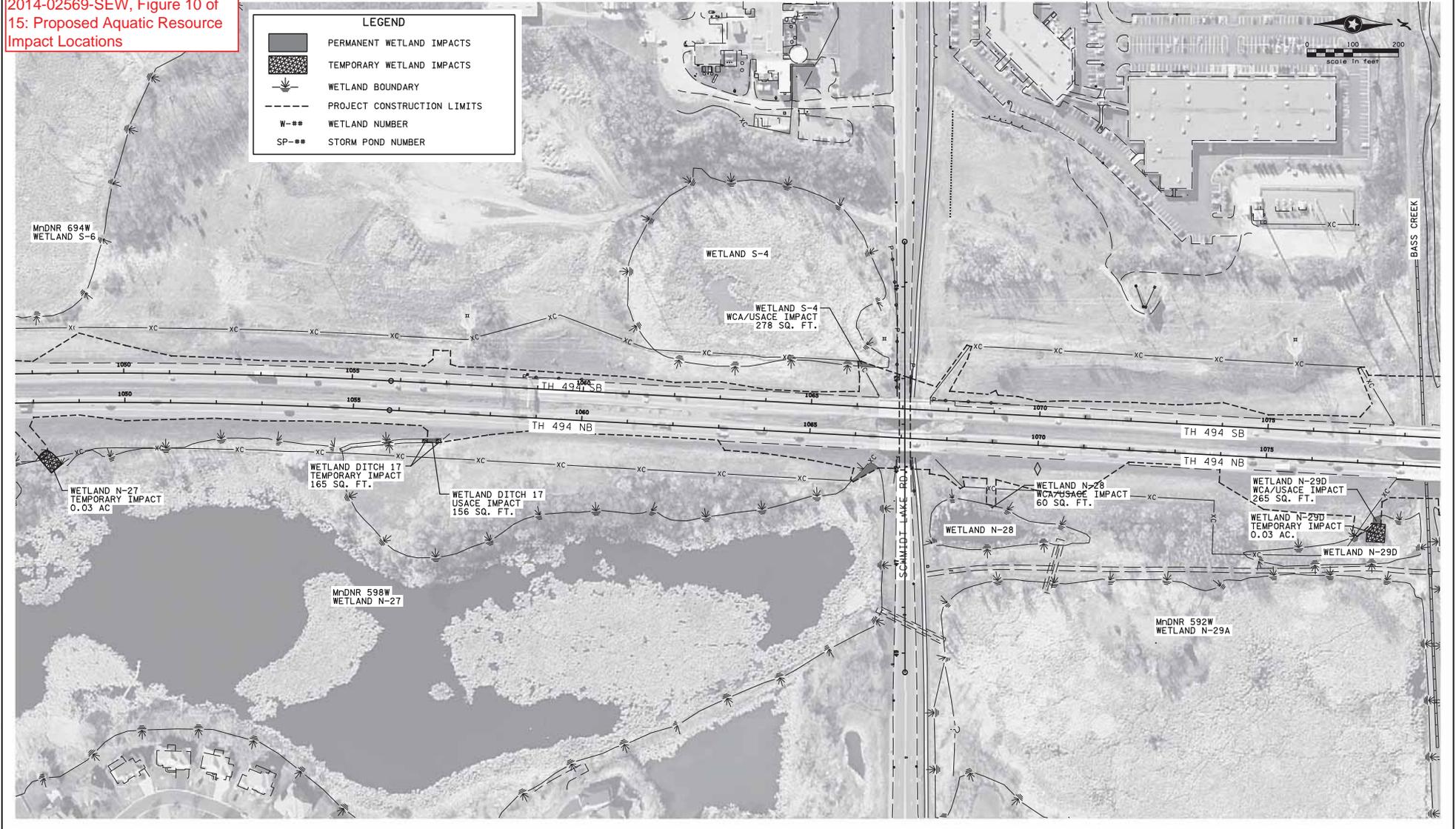
2014-02569-SEW, Figure 9 of 15:  
Proposed Aquatic Resource  
Impact Locations



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Figure 9

2014-02569-SEW, Figure 10 of 15: Proposed Aquatic Resource Impact Locations



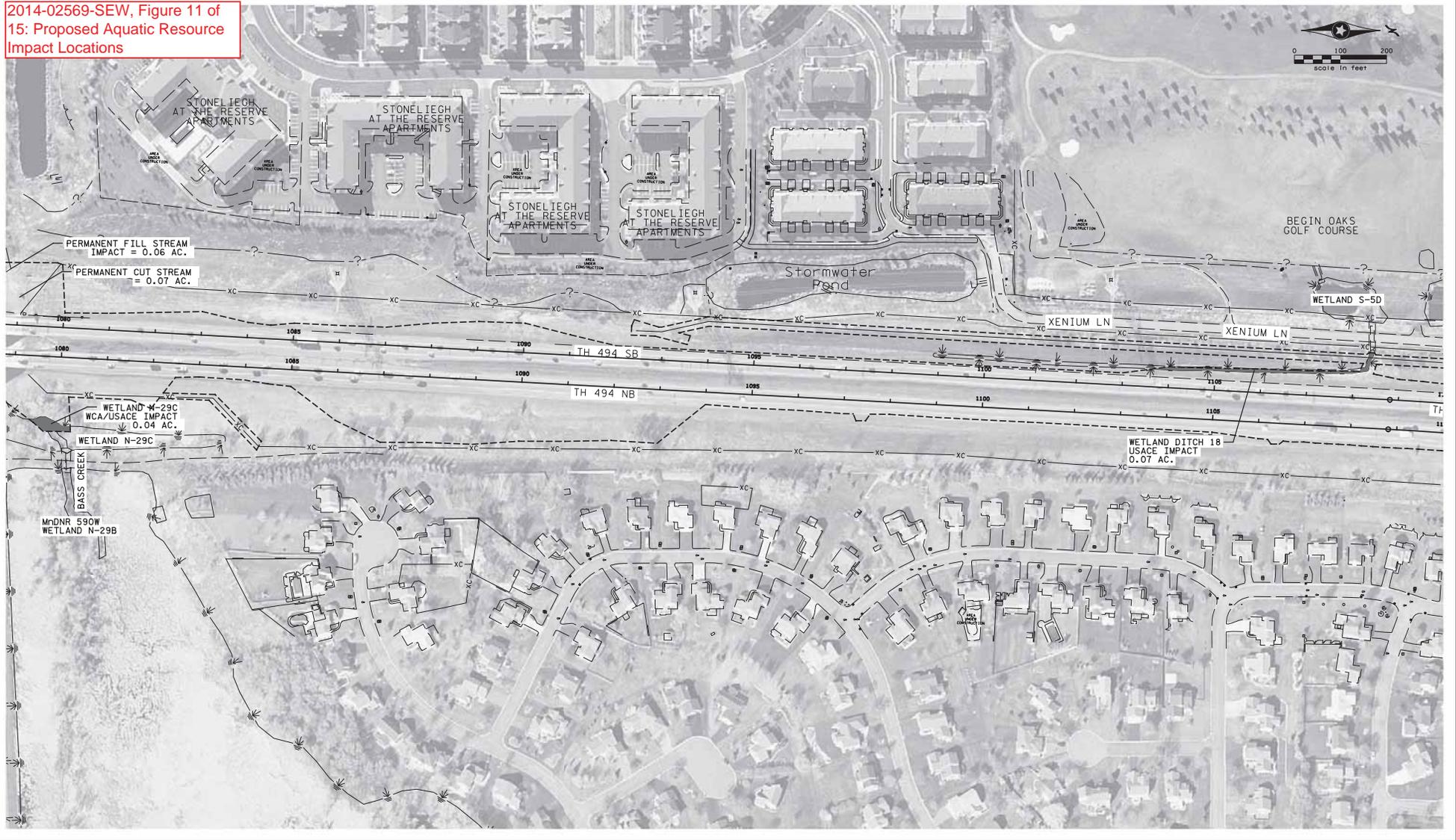
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**SRE** WETLAND IMPACTS

Consulting Group, Inc. T.H. 494 GENERAL PURPOSE LANES (OAKLAND AVE TO FISH LAKE INTERCHANGE)  
 Job # S.P. 2785-330  
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Figure 10

2014-02569-SEW, Figure 11 of 15: Proposed Aquatic Resource Impact Locations



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Figure 11

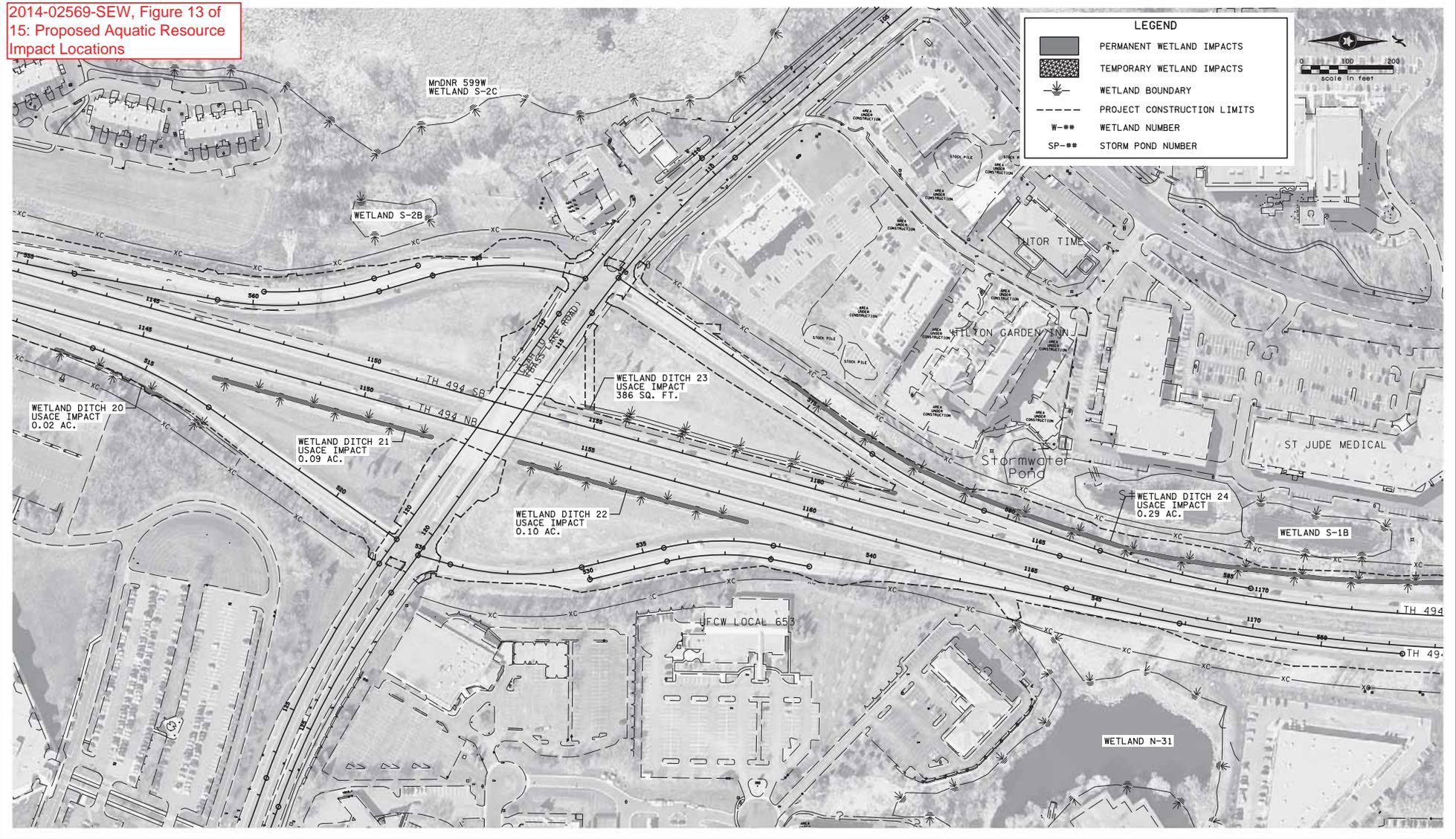
2014-02569-SEW, Figure 12 of 15: Proposed Aquatic Resource Impact Locations



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Figure 12

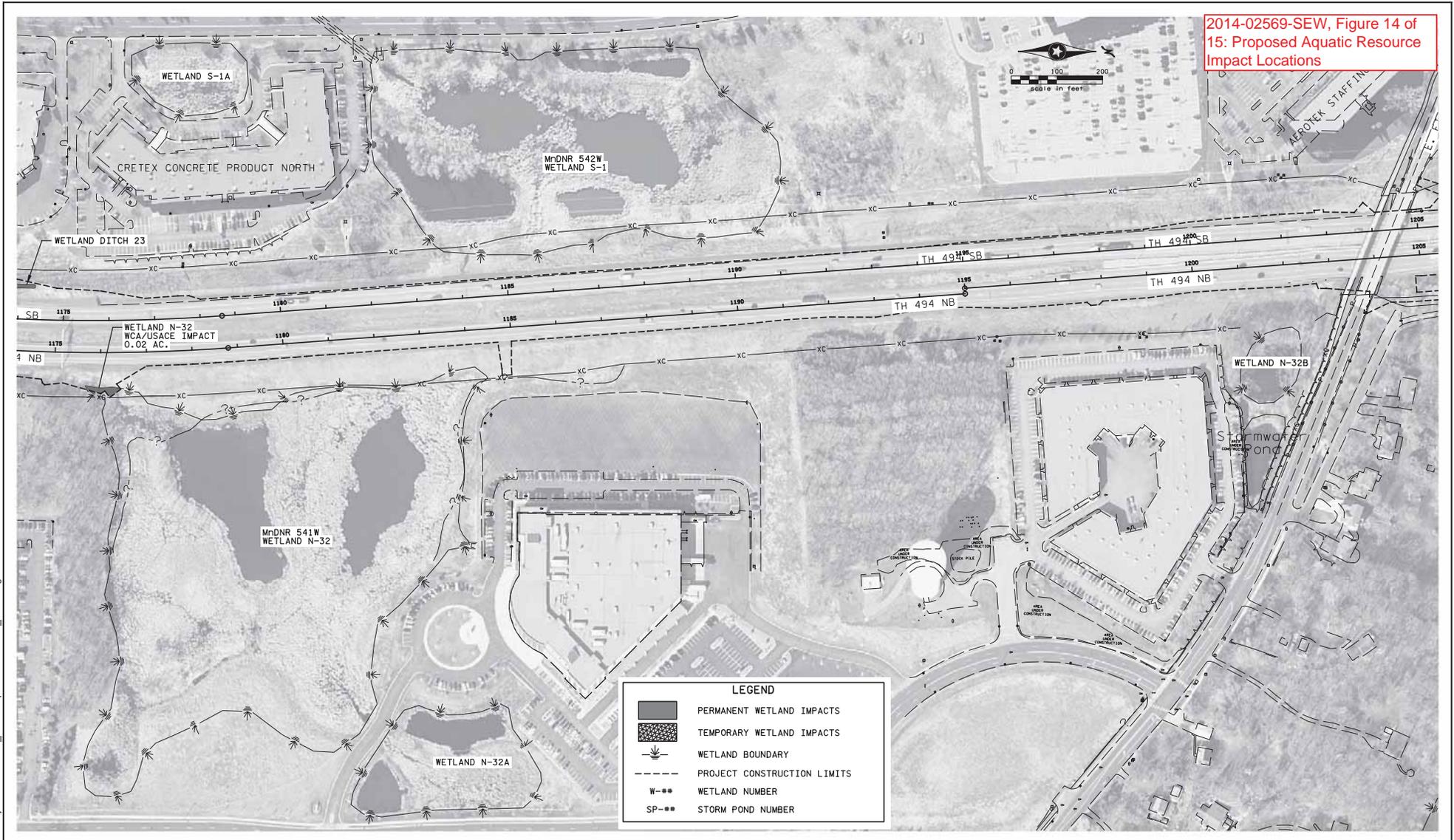
2014-02569-SEW, Figure 13 of 15: Proposed Aquatic Resource Impact Locations



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Figure 13

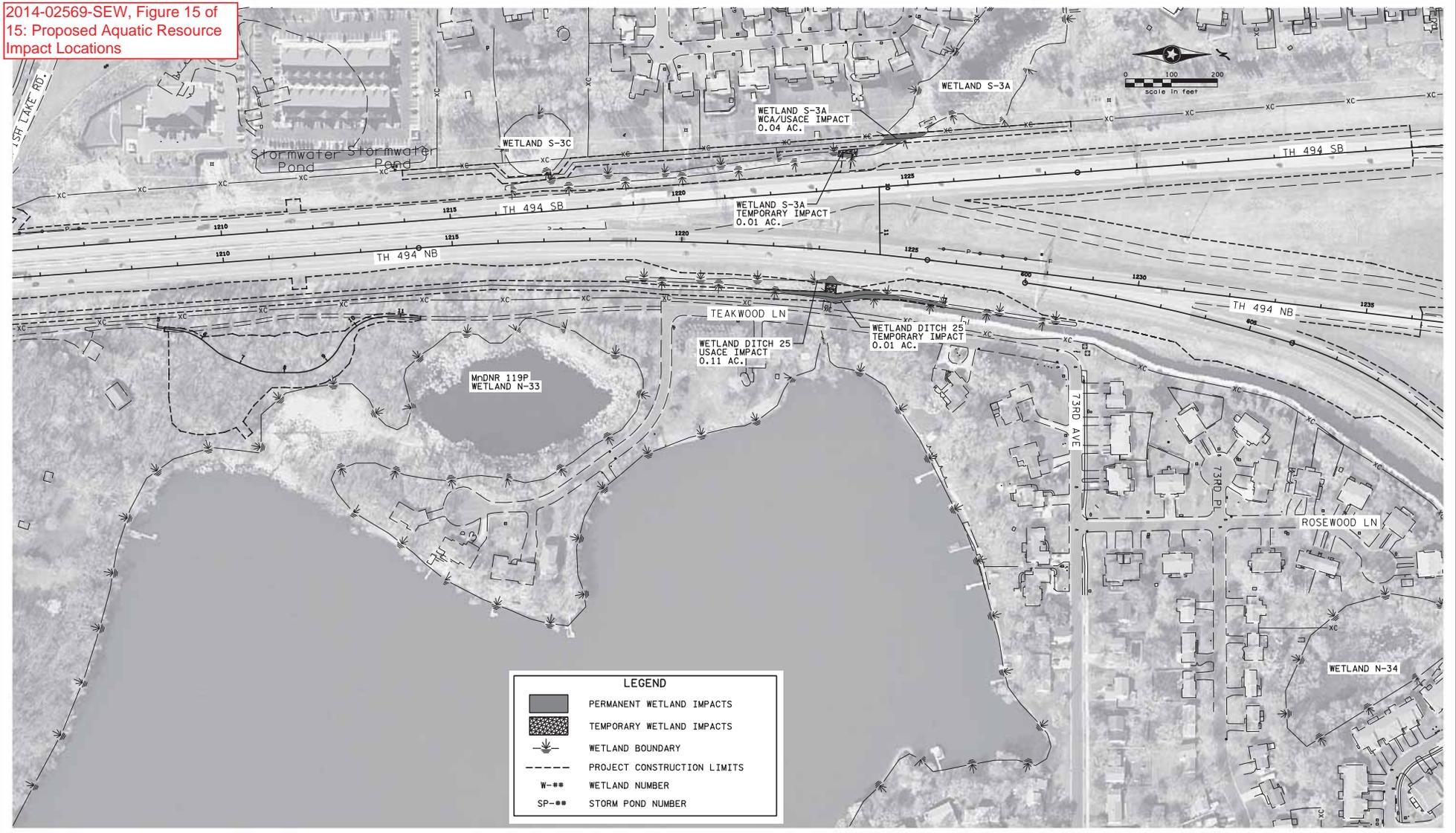
2014-02569-SEW, Figure 14 of 15: Proposed Aquatic Resource Impact Locations



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Figure 14

2014-02569-SEW, Figure 15 of 15: Proposed Aquatic Resource Impact Locations



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Figure 15